In the Claims

1 (Currently Amended) An extruded heat sink for use in cooling an electronic component, said heat sink having a body with a flat generally planar portion and two laterally facing exterior portions, a plurality of thin fins extending outwardly from said body and being elongated in the direction along said two lateral exterior portions, a cavity between adjacent fins of the plurality of fins, the cavity extending from the body to a tip of the adjacent fins, each of said lateral portions having elongated ridges formed thereabout extending the full length of said lateral exterior portions, the elongated ridges having a bottom edge displaced from the flat generally planar portion in a direction of extension of the two laterally facing exterior portions a distance, a space formed between each of the laterally facing exterior portions and a neighboring fin and extending from proximate the elongated ridges to a tip of the neighboring fin and having a depth less than a depth of the cavity, and the elongated ridges constructed to removably engage a retention means for receiving the heat sink to a frame.

2. (Original) The extruded heat sink of claim 1 wherein said extruded heat sink is aluminum.

3. (Original) The extruded heat sink of claim 1 absent surface machining and absent surface holes therein.

4. (Currently Amended) A heat sink comprising:

a base having a first side and a second side;

a plurality of fins extending from the first side of the base and including a first fin, a number of intermediate fins, and a last fin; ~~and~~

a groove formed in the first and the last fin and constructed to engage a retainer therein, each groove offset from the base a distance of at least a thickness of the base; and

a U-shaped cavity formed between adjacent fins of the number of intermediate fins and a non-U-shaped cavity formed between the first fin and a neighboring fin and another non-U-shaped cavity formed between the last fin and a neighboring fin.

5. (Currently Amended) The heat sink of claim 4 wherein each of the first fin and the last fin further comprises a common section adjacent the base and a divergent section at a

distal end of each of the first fin and the last fin, each distal end having a pair of fins and wherein the groove is formed proximate an interface of the common section and the divergent section.

6. (Previously Presented) The heat sink of claim 4 wherein the retainer maintains a contact between the second side of the heat sink and a heat generating component.

7. (Previously Presented) The heat sink of claim 4 wherein the groove in the first fin is generally coplanar with the groove formed in the second fin.

8. (Currently Amended) The heat sink of claim 4 wherein the first fin and the last fin extend a distance from the base and ~~a plurality of fins between the first fin and the last fin~~the number of intermediate fins extend approximately twice the distance from the base.

9. (Previously Presented) The heat sink of claim 4 wherein the plurality of fins extend a distance from the base longer than a distance between the first and the last fins.

10. (Previously Presented) The heat sink of claim 4 formed of extruded aluminum.

11. (Previously Presented) The heat sink of claim 4 wherein the plurality of fins are generally perpendicular to the base.

12. (Currently Amended) A heat sink comprising:

a base having a generally planar side constructed to engage an electrical component to be cooled and another side generally opposite thereto, a first end, a second end, and a thickness;

a pair of external ~~surfaces~~ portions extending generally transverse to the base from the another side, each of the pair of external portions extending a length greater than the thickness of the base above the base from the first and second ends of the base; and

a plurality of fins extending from the another side of the base between the pair of external ~~surfaces~~portions; and extending a length ~~different~~ greater than the length of the external ~~surfaces~~portions.

13. (Currently Amended) The heat sink of claim 12 wherein the length of the external ~~surfaces~~ portions is approximately half the length of the plurality of fins.

14. (Currently Amended) The heat sink of claim 12 further comprising a retainer constructed to engage an end of each of the pair of external ~~surfaces~~portions.

15. (Currently Amended) The heat sink of claim 14~~12~~ wherein the retainer snap-fittingly engages the end of each of the pair of external portions and retains the generally planar side of the base in thermal communication with ~~is constructed to thermally engage an~~the electrical component to be cooled when engaged therewith.

16. (Previously Presented) The heat sink of claim 12 formed of extruded aluminum.

17. (Currently Amended) The heat sink of claim 12 wherein the plurality of fins are generally perpendicular to the base and generally parallel to the external ~~surfaces~~portions.

18. (Currently Amended) The heat sink of claim 12 wherein the external ~~surfaces~~portions are generally thicker than the plurality of fins.

19. (Currently Amended) A heat sink assembly comprising:

a heat sink having a base with a pair of generally parallel sides and a first end fin and a second end fin, each of the first end fin and the second end fin extending from the base and separated from a neighboring fin by a width that is generally fixed along a length of each of the first end fin and the second end fin; and

~~a retention ridge having an opening therein such that no portion of the ridge is co-planar with any portion of the base;~~

a plurality of intermediate fins extending from the base between the first and second end fins beyond the first end fin and the second end fin.

20. (Previously Presented) The assembly of claim 19 further comprising a heat generating device in thermal contact with the base.

21. (Previously Presented) The assembly of claim 19 wherein the plurality of fins are generally perpendicular to a section of the base between the pair of generally parallel sides.

22. (Previously Presented) The assembly of claim 19 wherein the heat sink is extruded aluminum.

23. (Original) The assembly of claim 19 wherein the first end fin and the second end fin each have a groove formed therein.

24. (Currently Amended) The assembly of claim 19 wherein the plurality of intermediate fins are ~~longer~~ thinner than the first and second end fins.

25. (Original) The assembly of claim 19 wherein the retainer is removably engageable to the heat sink by hand and without use of any mounting hardware or tools.